# Before the Federal Communications Commission Washington D.C. 20554

In the Matter of	)	
	)	
Advanced Television Systems	)	MB Docket No. 87-268
And Their Impact on the	)	
Existing Television Broadcast	)	
Service	)	

To: The Commission

#### PETITION FOR RECONSIDERATION

Mississippi Television, LLC ("Mississippi Television"), by its attorneys, hereby submits this Petition for Reconsideration of the Seventh Report and Order in the above referenced docket. Mississippi Television requests a new digital allotment for WUFX(TV) (Facility ID 84253), Vicksburg, Mississippi, a singleton station ("WUFX" or the "Station") for post-transition digital television ("DTV").

Currently, WUFX operates as a singleton station on NTSC Channel 35. WUFX began operations in 2003 and thus was not eligible for a paired digital channel. Therefore, the Station elected to flash-cut to digital on Channel 35 for post-transition DTV operations. For the reasons set forth below, however, Mississippi Television submits that the public interest would be better served if WUFX were allotted Channel 41 for post-transition digital operations.

Pursuant to a shared services agreement, Mississippi Television provides technical and other services to WDBD(TV) (Facility ID 71326), Jackson, Mississippi ("WDBD").

WDBD(TV) was allotted Channel 40 for post-transition digital operations. Mississippi Television has determined that the digital operations of WDBD(TV) on Channel 40 can be diplexed with the digital operations of WUFX on Channel 41. *See* Technical Statement of

Robert Weller, Hammett & Edison, Inc., attached as <u>Exhibit 2</u>, which confirms the technical feasibility of this proposal.

This proposal well-serves the public interest. By consolidating the technical operations of WUFX and WDBD, WUFX will be able to provide service to 358,000 new viewers, an expansion of 68% over WUFX's allotted Channel 35 facilities. *See* Technical Statement of Robert Weller, Hammett & Edison, Inc., Exhibit 2. Significantly, WUFX's digital operations on Channel 41 will require little equipment modification. WUFX will be able to shut off its analog Channel 35 antenna and immediately begin operating on its combined Channel 41/ Channel 40 antenna. Thus, the public interest will be further served by ensuring uninterrupted service to the public. Moreover, allowing this modification will reduce the strain on equipment manufacturers, tower crews and engineers, as WUFX will not need to order or install a new digital Channel 35 antenna.

In sum, allowing WUFX to operate on Channel 41 for post-transition digital operations would better serve the public interest. It would allow WUFX to complete the transition with minimal disruption to its viewers. Additionally, it would allow WUFX bring its service to 358,000 new viewers. Accordingly, for the reasons stated herein, Mississippi Television respectfully requests that the Commission grant WUFX Channel 41 for post-transition operations

Respectfully submitted,

and modify the DTV Table of Allotments, Appendix B, accordingly.

MISSISSIPPI TELEVISION, LLC

/s/

Gregory L. Masters Joan Stewart Its Attorneys

WILEY REIN LLP 1776 K Street N.W. Washington D.C. 20006 202,719,7000

Dated: October 26, 2007

# Exhibit 1

# **DECLARATION OF DAVID JOSEPH**

- I, David Joseph, hereby declare under penalty of perjury that the following is true and correct:
  - 1. I am Manager of Mississippi License, LLC, the licensee of WUFX(TV).
- 2. I have reviewed the foregoing Petition for Reconsideration and, to the best of my knowledge, information and belief formed after reasonably inquiry, it is well grounded in fact.

David Joseph

Dated: October 26, 2007

# Exhibit 2

### Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by Mississippi Television, LLC, licensee of Station WUFX, Channel N35/FCD Channel D35, Vicksburg, Mississippi, to prepare an engineering statement in support of its petition for reconsideration of the antenna pattern contained in Appendix B of the Seventh Report and Order to MB Docket 87-268 (7R&O).\*

### **Background**

At paragraph 72 to its 7R&O, the Commission granted certain stations' requests for alternative channel assignment to certain stations, including,

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"... new licensees and permittees that attained such status after the start of the channel election process and to which we assigned a TCD for post-transition DTV operations because their assigned NTSC or DTV channel was determined to cause impermissible interference to existing licensees."
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TV Station WUFX commenced operation on NTSC Channel 35 in 2003, and hence did not receive a paired (transitional) DTV channel. In Appendix B to the Seventh Further Notice of Proposed Rule Making,<sup>†</sup> the Commission tentatively assigned the same channel (35) to WUFX for post-transition DTV operation. That assignment was made final in Appendix B to the 7R&O.

# Request for Post-Transition Operation on Channel D41

The licensee of WUFX has entered into a shared services agreement with the licensee of TV Station WDBD, FCD Channel D40, Jackson, Mississippi, and wishes to consolidate the transmission facilities for the two stations. Because of the economic benefit of sharing certain technical facilities, such consolidation would allow improved coverage for both stations in the relatively small Jackson DMA (DMA No. 89).‡ The technical specifications of the proposed allotment are as follows:

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Community: Vicksburg, Mississippi
DTV Channel: 41

Geographic Coordinates (NAD27): N32-12-49, W90-22-56
Antenna Height: 690 meters AMSL/598 meters HAAT
ERP: 1,000 kW
Antenna Pattern: ID 43325 (Andrew ATW28H3-HST1)
Pattern rotation: 330°T
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As shown in Figure 1, attached, the proposed allotment of Channel D41 in lieu of D35 to WUFX does not create any "DTV White Area" (areas that are within the service contour of the existing FCD35

<sup>&</sup>lt;sup>‡</sup> Broadcasting & Cable Yearbook, 2007 edition. **HAMMETT & EDISON, INC.** 



<sup>\* &</sup>quot;Advanced Television Systems and their Impact Upon the Existing Television Broadcast Service," FCC 07-138, released August 6, 2007.

<sup>†</sup> FCC 06-150, Released October 20, 2006.

allotment, but not within the proposed D41 allotment). As shown in Figure 2, the proposed allotment of Channel D41 creates only *de minimis* interference to others stations. Finally, the proposed allotment of Channel D41 to WUFX creates new service to at least 358,000 persons (2000 Census) not predicted to be served by the existing FCD35 allotment, representing a coverage improvement of over 68%.§

### **List of Figures**

In carrying out these engineering studies, the following attached figure was prepared under my direct supervision:

- 1. Service Contours of Existing FCD35 Allotment and Proposed D41 Allotment Showing No Loss of Service
- 2. Results of OET-69 Interference Study showing only de minimis interference

No. E-12627
Exp. 09-30-09
Robert D. Weller, P.E.

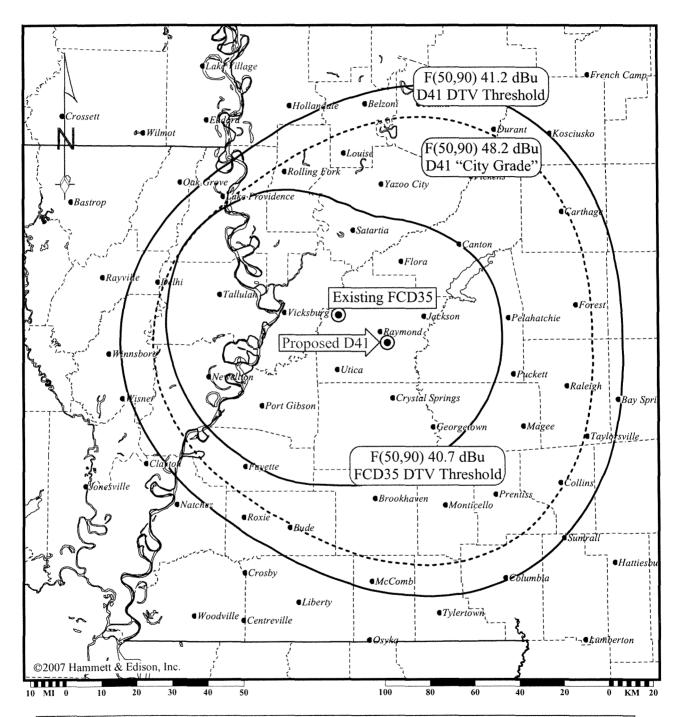
October 25, 2007

As shown in Figure 2, the predicted interference-free coverage of the proposed D41 allotment is 884,264 persons (2000 U.S. Census). Appendix B of the 7R&O lists the interference free coverage of the existing FCD35 allotment as 526,000 persons. The difference between these two values is 358,264 persons, representing a 68.1% increase.



HAMMETT & EDISON, INC. CONSULTING ENGINEERS SAN FRANCISCO

# Service Contours of Existing FCD35 Allotment and Proposed D41 Allotment Showing No Loss of Service



Lambert conformal conic map projection. City locations shown taken from 2000 U.S. Census Bureau TIGER data.



#### Results of OET-69 Interference Study

Percent allowed new interference: 0.100

Percent allowed new interference to Class A: 0.100

Census data selected 2000

Post Transition Data Base Selected /space/software/cdbs/tvdb.sff\_B

#### TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 10-25-2007 Time: 10:57:54

Record Selected for Analysis

WUFX USERRECORD-01 VICKSBURG MS US

Channel 41 ERP 1000. kW HAAT 596. m RCAMSL 00690 m

Latitude 032-12-49 Longitude 0090-22-56

Status APP Zone 2 Border

Dir Antenna Make CDB Model 00000000043325 Beam tilt N Ref Azimuth 330.

Last update Cutoff date Docket

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility does not meet maximum height/power limits Channel 41 ERP = 1000.00 HAAT = 596.

Azimuth	ERP	TAAH	41.0 dBu F(50,90)
(Deg)	(kW)	(m)	(km)
0.0	516.961	602.6	114.5
45.0	826.281	582.9	117.8
90.0	224.676	594.4	106.7
135.0	826.281	585.7	118.0
180.0	516.961	576.0	113.1
225.0	298.662	597.6	109.4
270.0	1000.000	622.6	121.8
315.0	298.662	605.4	109.7

Evaluation toward Class A Stations
No Spacing violations or contour overlap to Class A stations
Class A Evaluation Complete

No spacing violations found to other full service stations

LANDMOBILE SPACING VIOLATIONS FOUND NONE

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountian

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations



#### Results of OET-69 Interference Study

\*

Start of Interference Analysis

Proposed Station

Call City/State ARN Channel

WUFX VICKSBURG MS USERRECORD01 41

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.	
40	WDBD	JACKSON MS	0.0	CP	BPCDT	-19980825KH
41	WEIQ	MOBILE AL	292.6	LIC	BLEDT	-20030430AAX
41	KBCA	ALEXANDRIA LA	257.1	CP	BPCT	-19940526KE
41	WBUY-TV	HOLLY SPRINGS MS	315.1	CP	BPCDT	-19991101AIC

Analysis of Interference to Affected Station 1

Analysis of current record

Channel Call City/State Application Ref. No. WDBD JACKSON MS BPCDT -19980825KH

Stations Potentially Affecting This Station

Chan Call City/State Dist(km) Status Application Ref. No.
40 WPAN FORT WALTON BEACH FL 379.6 CP BPCDT -19991029AGW
40 KBTV-TV PORT ARTHUR TX 412.0 CP MOD BMPCDT -20040312ADS
41 WUFX VICKSBURG MS 0.0 APP USERRECORD-01 Proposal causes no interference

Analysis of Interference to Affected Station 2

Analysis of current record

Channel Call City/State Application Ref. No. BLEDT -20030430AAX WEIQ MOBILE AL

Stations Potentially Affecting This Station

Chan Call City/State Dist(km) Status Application Rel. 20.

40 WPAN FORT WALTON BEACH FL 90.7 CP BPCDT -19991029AGW

42 WAKA SELMA AL 196.4 CP BSRCCT -20060331ATO

42 WHMM-DT HAMMOND LA 210.6 CP BPCDT -19960920LW

41 WUFX VICKSBURG MS 292.6 APP USERRECORD-01

Total scenarios = 2

Result key: 1

Scenario 1 Affected station 2

Before Analysis



# **Results of OET-69 Interference Study**

results of		icromoc otday	
Results for: 41A AL MOBILE HAAT 185.0 m, ATV ERP 199.0 kV		20030430AAX	LIC
F	POPULATION	AREA (sq km)	
within Noise Limited Contour	913257	16457.3	
not affected by terrain losses	912795	16373.4	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	405	12.0	
lost to ATV IX only	405	12.0	
lost to all IX	405	12.0	
Potential Interfering Stations Inc	cluded in ab	ove Scenario	1
40A FL FORT WALTON BEACH BPCDT	19991029	AGW CP	
After Analysis			
Results for: 41A AL MOBILE HAAT 185.0 m, ATV ERP 199.0 kV		20030430AAX	LIC
· · · · · · · · · · · · · · · · · · ·		AREA (sq km)	
within Noise Limited Contour	913257	16457.3	
not affected by terrain losses	912795	16373.4	
lost to NTSC IX	0	0.0	
lost to Mide in lost to additional IX by ATV	722	76.0	
lost to ATV IX only	722	76.0	
lost to all IX	722	76.0	
	-		
Potential Interfering Stations Inc	cluded in ab	ove Scenario	1
40A FL FORT WALTON BEACH BPCDT	19991029	AGW CP	
41A MS VICKSBURG USERREC	CORD01	APP	
Percent new IX = 0.0347%			
Result key: 2			
Scenario 2 Affected station Before Analysis	n 2		
Results for: 41A AL MOBILE		20030430AAX	LIC
HAAT 185.0 m, ATV ERP 199.0 kV			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	913257	16457.3	
not affected by terrain losses	912795	16373.4	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	405	12.0	
lost to ATV IX only	405	12.0	
lost to all IX	405	12.0	
Potential Interfering Stations Inc	cluded in ab	ove Scenario	2
40A FL FORT WALTON BEACH BPCDT	19991029	AGW CP	
After Analysis			
Results for: 41A AL MOBILE HAAT 185.0 m, ATV ERP 199.0 kW	BLEDT	20030430AAX	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	OL OHMITON	16457.3	



#### **Results of OET-69 Interference Study**

not affected by terrain losses	912795	16373.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	722	76.0
lost to ATV IX only	722	76.0
lost to all IX	722	76.0

Potential Interfering Stations Included in above Scenario 2

40A FL FORT WALTON BEACH BPCDT 19991029AGW CP 41A MS VICKSBURG USERRECORD01 APP

Percent new IX = 0.0347%

Worst case new IX 0.0347% Scenario

Analysis of Interference to Affected Station 3

Analysis of current record

Channel Call City/State Application Ref. No.
41 KBCA ALEXANDRIA LA BPCT -19940526KE

Stations Potentially Affecting This Station

Chan Call City/State Dist(km) Status Application Ref. No.
40 KBTV-TV PORT ARTHUR TX 155.0 CP MOD BMPCDT -20040312ADS
41 KAZH BAYTOWN TX 314.6 CP BPCDT -19991101ADZ
41 WUFX VICKSBURG MS 257.1 APP USERRECORD-01

Total scenarios = 2

Result key: 3

Scenario 1 Affected station 3

Before Analysis

Results for: 41A LA ALEXANDRIA BPCT 19940526KE CP

HAAT 307.0 m, ATV ERP 191.0 kW

within Noise Limited Contour 368631 16253.3 not affected by terrain losses 368631 16249.2 lost to NTSC IX 0 0.0 lost to additional IX by ATV 2 4.0 lost to ATV IX only 2 4.0 lost to all IX 2 4.0

Potential Interfering Stations Included in above Scenario 1

41A TX BAYTOWN BPCDT 19991101ADZ CP

After Analysis

Results for: 41A LA ALEXANDRIA BPCT 19940526KE CP

HAAT 307.0 m, ATV ERP 191.0 kW

POPULATION AREA (sq km)



# **Results of OET-69 Interference Study**

within Noise Limited Contonot affected by terrain lolost to NTSC IX lost to additional IX by A	sses	368631 0	16249.2 0.0	
lost to additional IX by A lost to ATV IX only lost to all IX		103 103	20.2	
Potential Interfering Static	ns Inclu	ded in abo	ve Scenario	1
	BPCDT JSERRECOR	19991101A D01	DZ CP APP	
Percent new IX = 0.0274%				
Result key: 4 Scenario 2 Affected s Before Analysis	station	3		
Results for: 41A LA ALEXANDRI HAAT 307.0 m, ATV ERP 19		BPCT	19940526KE	CP
11A1 507.0 m, 111 1212	POP	ULATION	AREA (sq km)	
within Noise Limited Conto				
not affected by terrain lo	osses		16249.2	
lost to NTSC IX	n rmt 7	0 2	0.0 4.0	
lost to additional IX by A	H.I. A	2	4.0	
lost to ATV IX only lost to all IX		2	4.0	
Potential Interfering Statio	ons Inclu	ded in abo	ove Scenario	2
41A TX BAYTOWN	BPCDT	199911017	ADZ CP	
After Analysis				
Results for: 41A LA ALEXANDR HAAT 307.0 m, ATV ERP 1		BPCT	19940526KE	CP
	POI		AREA (sq km)	
within Noise Limited Cont	our	368631	16253.3	
not affected by terrain l	osses		16249.2	
lost to NTSC IX	7. 1777.7	0 103	20.2	
lost to additional IX by lost to ATV IX only	AIV	103	20.2	
lost to all IX		103	20.2	
Potential Interfering Stati	ons Incl	uded in abo	ove Scenario	2
	BPCDT USERRECO		ADZ CP APP	
Percent new IX = 0.0274%				
Worst case new IX 0.0274%	Scenario	0 1		

Analysis of Interference to Affected Station 4



#### **Results of OET-69 Interference Study**

Analysis of current record

City/State Application Ref. No. Channel Call

WBUY-TV HOLLY SPRINGS MS BPCDT -19991101AIC

Stations Potentially Affecting This Station

Dist(km) Status Application Ref. No. City/State Chan Call HUNTSVILLE AL 289.0 CP MOD BMPCDT -20020708AAU 41 WZDX 251.1 LIC BLEDT -20020304ALI PADUCAH KY 41 WKPD 41 WUFX VICKSBURG MS 315.1 APP USERRECORD-01

Total scenarios = 2

Result key: 5
Scenario 1 Affected station 4

Before Analysis

BPCDT 19991101AIC CP Results for: 41A MS HOLLY SPRINGS HAAT 122.0 m, ATV ERP 500.0 kW

POPULATION AREA (sq km) within Noise Limited Contour 1281972 16349.3 not affected by terrain losses 1280923 16220.9 0 0.0 lost to NTSC IX 1750 140.4 lost to additional IX by ATV 1750 140.4 lost to ATV IX only 1750 140.4 lost to all IX

Potential Interfering Stations Included in above Scenario

BMPCDT 20020708AAU CP 41A AL HUNTSVILLE

After Analysis

BPCDT 19991101AIC CP Results for: 41A MS HOLLY SPRINGS

HAAT 122.0 m, ATV ERP 500.0 kW

POPULATION AREA (sq km) within Noise Limited Contour 1281972 16349.3 not affected by terrain losses 1280923 16220.9 0 0.0 lost to NTSC IX lost to additional IX by ATV 2780 172.4 2780 172.4 lost to ATV IX only 172.4 2780 lost to all IX

Potential Interfering Stations Included in above Scenario 1

41A AL HUNTSVILLE BMPCDT 20020708AAU CP USERRECORD01 APP 41A MS VICKSBURG

Percent new IX = 0.0805%

6 Result key:

Scenario 2 Affected station

Before Analysis

BPCDT 19991101AIC CP Results for: 41A MS HOLLY SPRINGS

HAAT 122.0 m, ATV ERP 500.0 kW



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CONSULTING ENGINEERS SAN FRANCISCO

### **Results of OET-69 Interference Study**

	POPULATION	AREA (sq km)
within Noise Limited Contour	1281972	16349.3
not affected by terrain losses	1280923	16220.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1750	140.4
lost to ATV IX only	1750	140.4
lost to all IX	1750	140.4

Potential Interfering Stations Included in above Scenario 2

41A AL HUNTSVILLE BMPCDT 20020708AAU CP

After Analysis

Results for: 41A MS HOLLY SPRINGS BPCDT 19991101AIC CP HAAT 122.0 m, ATV ERP 500.0 kW

within Noise Limited Contour 1281972 16349.3 not affected by terrain losses 1280923 16220.9 lost to NTSC IX 0 0.0 lost to additional IX by ATV 2780 172.4 lost to ATV IX only 2780 172.4 lost to all IX 2780 172.4

Potential Interfering Stations Included in above Scenario 2

41A AL HUNTSVILLE BMPCDT 20020708AAU CP 41A MS VICKSBURG USERRECORD01 APP

Percent new IX = 0.0805%

Worst case new IX 0.0805% Scenario 1

Analysis of Interference to Affected Station 5

Analysis of current record

Channel Call City/State Application Ref. No. 41 WUFX VICKSBURG MS USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Applicati	on Ref. No.
40	WDBD	JACKSON MS	0.0	CP	BPCDT	-19980825KH
41	WEIQ	MOBILE AL	292.6	LIC	BLEDT	-20030430AAX
41	KBCA	ALEXANDRIA LA	257.1	CP	BPCT	-19940526KE
41	WBUY-TV	HOLLY SPRINGS MS	315.1	CP	BPCDT	-19991101AIC

Total scenarios = 1

Result key: 7

Scenario 1 Affected station 5

Before Analysis



# Results of OET-69 Interference Study

Results for: 41A MS VICKSBURG HAAT 596.0 m, ATV ERP 1000.0		USERRECORD01		
HAAT 596.0 m, AIV ERF 1000.0	POPULATION	AREA (sq km)		
within Noise Limited Contour	887081	40417.1		
not affected by terrain losse	s 886191	40296.0		
lost to NTSC IX	0	0.0		
lost to additional IX by ATV	1927	177.6		
lost to ATV IX only	1927	177.6		
lost to all IX	1927	177.6		
Potential Interfering Stations	Included in al	bove Scenario	1	
41A AL MOBILE BLED	T 2003043	OAAX LIC		
	1994052	6KE CP		
41A MS HOLLY SPRINGS BPCD	T 1999110	1AIC CP		
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